

ON SOME ASIATIC SPECIES OF CARTEROCEPHALUS

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1. The true *Carterocephalus*¹ *dieckmanni* Graeser.

In 1888 (Berl. Ent. Z.) Graeser described a new *Carterocephalus*, *dieckmanni* from two males taken near Vladivostok; in 1891 (Entmol. XXIV Suppl.) Leech named another Asiatic species, from Tibet, *gemmatus*; a month later, this was described and figured as *demea* by Oberthur (Etudes Entom.) who never forgave Leech for having hastily forestalled him after seeing a proof copy of the plate; and in 1897 Elwes and Edwards, revising the family (Trans. Zool. Soc.) cheerfully sank both *gemmatus* Leech and *demea* Obthr., as synonyms of Graeser's *dieckmanni*.

Little though Leech seems to have deserved it, his *gemmatus* (*demea* Obthr.) must now be restored. Elwes and Edwards' error was rather remarkable in view of Oberthur's perfect representation of his *demea* and of Graeser's detailed and beautifully accurate description of his *dieckmanni*; but more remarkable still is the fact that this confusion ("*dieckmanni* Graeser = *gemmatus* Leech) has been kept up for half a century by other writers including of course Mabille, in his half-hearted, incredibly muddled survey (I volume of Seitz), and Gaede (Suppl. to "Seitz") who, however, was sufficiently acquainted with the facies of the alleged synonym to be bothered by the figure in Seitz, and no wonder he was; that figure happens to represent the true *dieckmanni*! "The form illustrated in volume I, says Gaede (trying as it were to patch up the matter), has two rows of white-spots on underside of hind wings. Occasionally these are conjoined forming two bands as illustrated by Oberthur."

The simple reality of course is that *gemmatus* Leech (*demea* Obthr.) and *dieckmanni* Graeser are separate species, and incidentally, the latter is more seldom met with in collections than the former. On the underside of the secondaries the central sil-

¹ The "black-and-white" group merges into the "golden" so naturally that I do not see any reason for isolating the former in the subgenus *Aubertia* very vaguely proposed by Oberthur in 1896.

very band of *gemmatus* is replaced in *dieckmanni* by three spots² with the general pattern recalling a "golden" species *argyro-stigma* Ev. (as was noted by Graeser himself); and another striking feature is that, in *gemmatus*, the fringes of the secondaries are dark, the costal part alone being white, whereas in *dieckmanni* (as again Graeser notes) they are white throughout except for a short stretch between the upper angle and vein 2 where there is a peculiar shading not quite reaching the outer edge.

The only specimen of *C. dieckmanni* at the American Museum of Natural History is a male, from Sining.

2. *Carterocephalus canopunctatus* new species.

Upperside brownish black with small dull-white spots; these recall *flavomaculatus* Obthr. in size and *christophi* Gr.-Grsh.³ in disposition. Wings and abdomen have a slim elongated appearance.

Primaries above with two spots in the cell, the first near the base, wedge-shaped, surmounted by a small bluish-white patch, the other at one third from the end, bar-shaped across the cell; below this a slightly broader spot placed outwards; and four sub-apical spots, the first three from near the costa in a narrow band divided by the veins and the fourth placed outwards, with a hardly perceptible dot in a line below. Apex tipped with white even more slightly than in *niveomaculatus* Obthr. Fringes brownish.

Secondaries with two spots, the first bar-shaped across the cell and the other below it less extended inwards than in *flavomaculatus*. Fringes shaded with brownish, except along the costa and at one point above the anal angle where they are white.

Primaries underside washed with olivaceous along the costa and on apical area, otherwise brown with the spots of the upperside reproduced and slightly enlarged.

Secondaries underside resembling *niveomaculatus* and, still more, *flavomaculatus*, olivaceous, with the usual pale pincer-shaped markings at the base, a yellow medial streak, a line of more or less distinct yellow dots along the margin and nine spots, silvery-white (except the small costal one, central series, which is yellowish as in *flavomaculatus*) and placed as follows: a sub-basal one, rounded, as large as in *flavomaculatus*; five forming a central

² This is curiously paralleled in another Hesperid genus, *Pyrgus*, by the difference between *maculata* Brem. et Gr. and *malvae* L.

³ Or rather *dulcis* Obthr. if the latter be considered as a form of *christophi* with slightly reduced spots. There is also *niveomaculatus* var. *tibetanus* South, but the author's meager description (Bomb. Nat. Hist. Soc. 1913) is worthless as the few characters he mentions might apply equally well to *christophi* or *dulcis*.

series, the fifth being more extended inwards than in *flavomaculatus* or *niveomaculatus*, and a sub-marginal series represented by a small rounded spot at the upper angle, one below, extended outwards (not both ways as in the two other species), and two in the medium interspaces.

One male, holotype, in the American Museum of Natural History, labelled "Ta-Tsien-Lu, Ost Tibet" and coming from the collection of Mr. E. L. Bell who obtained it from the firm of Staudinger and Bang Haas.